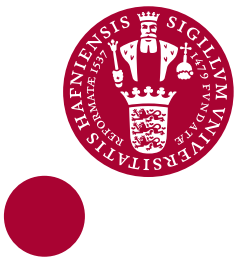

Banking on the Future: Everything you always wanted to know about sperm donation in China

Wahlberg, Ayo

Published in:
World Policy Journal

DOI:
10.1215/07402775-6894861

Publication date:
2018

Document version
Peer reviewed version

This paper has been accepted for publication in the World Policy Journal and the final (edited, revised and typeset) version of this paper will be published in the World Policy Journal 35(1), 2018 by Duke University Press.

Banking on the Future: Everything You Always Wanted to Know About Sperm Donation in China

By Ayo Wahlberg, Department of Anthropology, University of Copenhagen

It's a sunny day in May, the relentless kind that sees people scurrying for the shade of roadside trees and the borrowed air-conditioning of corner shops. I jump off bus 405 as it stops along Furong Road, a congested six-lane thoroughfare that splits Changsha, the capital of China's Hunan Province, north to south. Just off Furong, Xiangya Road is its usual bustling self. Cars honk and pedestrians push past pharmacies, food stalls, clothing shops, vegetable stands, shoe-shiners, and fortune tellers. I approach 84 Xiangya Road where the 15-story CITIC-Xiangya Reproductive and Genetic Hospital lies, home to one of the world's largest sperm banks and fertility clinics. Hordes of people are milling around the entrance. Some have slept outside on the pavement in order to be among the first to enter once doors open for the day. Most of them are there to seek fertility treatment, clutching their queuing tickets as they wait their turn to be called to the triage desk that manages inquiries from new patients. The building itself is incessantly abuzz as patients, nurses, doctors, janitors, and technicians navigate their way through the masses of people that can be found everywhere, in waiting rooms, elevators, hallways, and consultation rooms.

Patients are impatiently asking when their turn might come while white-coated doctors and pink-coated nurses somehow go about their daily routines, weaving through the throngs as they do. Two men are wheeling a large tank of liquid nitrogen toward the elevator, pleading for headway as they inch forward. Everything around me is in motion as I ponder how best to make my way to the sperm bank on the fourth floor.

From crude and uneasy beginnings, sperm banking has become a routine part of China's reproductive complex within the space of 30 years. Today, there are 23 sperm banks spread out across China's 22 provinces, the biggest of which screen some 2,000 to 4,000 potential donors each year. Those who qualify donate 12 to 15 times over a six-month period in return for monetary compensation and the satisfaction of being able to help involuntarily childless couples. The majority of these donors are university students, who are considered to be of "high quality" because of their age and success in the competitive educational system. It is reckoned by family planning officials and reproductive scientists that their donations can contribute to the strengthening of the Chinese population.

The first baby conceived from frozen donor sperm in China was born in 1983 in Changsha. Six years later, the provincial government in Hunan prohibited the practice of artificial insemination. This ban was subsequently overturned, and in 2003 it was superseded by national legislation, which, for the first time, legalized and regulated the

provision of assisted reproductive technologies, including sperm banking and assisted insemination by donor. In the last 10 years, sperm banking has been systematized in China with the closure of "rogue" banks and the establishment of strict licensing and operating procedures. Donor sperm is made available primarily to married couples living with male infertility (but also couples in which the male is considered to have a genetic disease that makes him "not suitable for reproduction"), while single women and lesbian couples are legally prohibited from accessing donor sperm. With an estimated 1-2 million azoospermic men (men who are unable to produce their own sperm) in China, a country of 1.2 billion people, the demand for donor sperm remains insatiable. The country's 23 sperm banks simply cannot keep up; directors publicly lament chronic shortages and even warn of a national "sperm crisis**."** Such a crisis has come at a time when China is grappling with the toxic side effects of voracious industrialization and, following three decades of restrictive family planning, coming to terms with a low fertility future in which births are to be encouraged.

+ + +

I first heard of this sperm crisis in 2008, when I came across a feature aired on the Shanghai News Channel. Against a montage of images showing crowded cities, high-tech laboratories, and urban workers, the commentator explained:

> With increasing industrialization, sperm quality worldwide is declining. Life pressure, smoking, drinking, pollution, lack of exercise, dressing the wrong way, and radiation from mobile phones and computers have all become hidden killers affecting sperm density and motility …

Shanghai television was not alone in propagating this storyline. Indeed, 2008 turned out to be the year that the media declared a "sperm crisis" and a related "national emergency." A news report from December 2008 proclaimed a "national emergency in sperm banks in China" when only 37 out of 328 potential donors qualified for donation. In that same year, the chief physician at the Ministry of Health China-Japan Friendship Hospital, who had carried out research on sperm quality for some 15 years, told a reporter that "If this trend continues, men will die without sons within 50 years!" Liu Dalin, a professor of sociology from Shanghai University, warned: "Do not let man become an endangered animal." In June 2010, journalists put numbers to the crisis as they reported that "the sperm quality of a man in Guangzhou has declined by 50 percent compared with 50 years ago … the quality and quantity of sperm have declined, which is a problem we need to attach great importance to." The possible causes of this "crisis"—lifestyle changes and the toxic effects of environmental pollution—are now matters of concern and objects of scientific research in China and elsewhere.

The other explanations for why infertility rates might be increasing are directly linked to China's one-child policy. With intense competition among the first one-child cohorts (currently in their 30s and 20s) for the best universities, best jobs, and indeed best marriage partners, the suggestion is that couples are intent on getting their careers established before they start families, much to the dismay of their parents. Age, especially

of women but also men, is of course the most reliable predictor of fertility; the older you are, the more difficult it is to conceive "naturally." With more people waiting longer to have their first child, it would make sense to see an increase in the number of couples who have trouble conceiving without technological assistance.

Many of the doctors I met also pointed to damage caused by multiple premarital abortions. Given the difficulties involved in registering a child born out of wedlock or without a so-called "pregnancy certificate," which confirms a couple's eligibility to have a child in accordance with family planning laws, some doctors believe that more abortions are being carried out—up to 13 million annually—which could lead to greater infertility. Additionally, this theory goes, abortion rates are connected to "increasing promiscuity" as more liberal attitudes toward sex are adopted. Family planning practices in China that explicitly set out to limit fertility may have exacerbated the infertility of many women.

In spite of the common perception in China, the jury is still out as to whether there has been a measurable decline in sperm quality or increase in infertility. (Scientists usually temper their findings by suggesting that infertility rates "may be" rising, that sperm quality "is possibly" falling, and that this decrease is "probably" being caused by exposure to industrial chemicals.) National statistics can be hard to come by, but the figures I heard most often were summarized by one of the doctors I met in Beijing when he suggested that "there were five to eight out of 100 couples with fertility problems some 20 or 30 years ago, and this figure has increased to more than 10 couples in recent years." There is no way of verifying whether there has been an increase of infertility in China, and if so, to what extent, but it is worth noting that 10 percent (the figure I heard most often) is the most commonly cited percentage for global estimates of infertility. Nevertheless, the "sperm crisis" has become a scientific assumption in China, and a pretext for how sperm banks approach donors and clients.

+ + +

The lead-up to this situation began in the late 1970s and 1980s, when China's policies were configured to restrict fertility. Indeed, the country's so-called "one-child policy" is one of its most internationally recognizable features today, even if it has since been tweaked into a "two-child policy." Launched in the late 1970s by the late chairman of the Communist Party, Deng Xiaoping, China's family-planning policies aimed at lowering the country's high fertility rate, which was considered a hindrance to economic development. Authorities were charged with meeting regional and local targets through the provision of contraception, sterilization, and abortion services as well as by fining couples who exceeded their quota of children. In the 1980s, when scientists such as Lu Guangxiu, a pioneer of IVF and artificial insemination, attempted to develop reproductive technologies that would promote fertility, her efforts were seen by some state officials and scientists as conflicting with ongoing efforts to prevent births.

By the mid-90s, a number of "rogue" sperm banks in places like Qingdao and Chongqing had begun offering donor sperm without any systematized screening practices and

without maintaining any records for traceability should anything go wrong. As Lu put it, "Suddenly sperm banks were getting out of control and a lot of people were providing this service; some were even operating out of a hotel!" No licenses were needed to open and operate a sperm bank, Lu said. "And for the sperm donors," she added, anybody could volunteer—"they were not doing any selection of donors."

To change the government's perspective on assisted reproduction, Lu argued that these technologies would actually help couples comply with the one-child policy. While for fertile couples, Lu said, "population policy requires that every family have only one child … for infertile couples we should help them to have one healthy baby." In 1999, the law was amended to permit artificial insemination, so long as the procedures were carried out at institutions run by family-planning departments. Eventually, assisted reproductive technologies, including sperm banking, settled alongside ligation operations, abortions, and maternal and infant health care as birth control technologies.

It was under these circumstances that between 2001 and 2003, the Ministry of Health finally legalized assisted reproductive technologies. What made these regulations distinctive was language stipulating that they could only be used by couples with both a marriage and a pregnancy certificate. Because of preexisting policies, treatment could be denied in situations where either partner "has a severe mental disease, genitourinary system inflammation, or sexually transmitted diseases," or any "serious diseases considered inappropriate for conception." In situations concerning the former, fertility treatment could be offered once the wife or husband had overcome the illness, whereas in the latter, treatment could not be offered at all. As a result, sperm banking in China is today used not only to help involuntarily childless couples conceive, but also to prevent or promote the birth of certain kinds of children. Since the 1990s, one of the explicit family planning objectives of the state has been to "improve the quality of the newborn population", in particular by preventing the birth of children with serious diseases with the help of reproductive technologies and prenatal care. Sperm banking is likewise seen as a way to achieve "better population quality" through the selective recruitment of "high-quality" donors.

In the space of just three decades, assistive reproductive technologies have become routinized on an astounding scale in China. By 2014, an estimated 400 centers offered such services, and there were a total of 15 provincial sperm banks. In Beijing, the number of IVF babies skyrocketed from 50 in the early 1990s to somewhere around the 200,000 mark nationally in 2017. In Changsha, the Xiangya Hospital exponentially increased the number of IVF cycles annually from 700 in 2002 to around 40,000 in 2016. Scaled-up IVF is now a reality in China, and growth continues to be driven both by insatiable demand, and because the sector has become quite lucrative.

At the same time, certain restrictions have generated arduous daily routines in Chinese sperm banks. Government regulations limit the number of children a single donor can father to five. (Denmark, with a population of five million, currently allows a donor to father 12 children; while Belgium, with a population of 11 million, allows six.) The most common explanation for this is that it reduces the risk of unwitting consanguineous

marriage and of spreading a genetic disease should a sperm donor turn out to have a late-onset disorder. Chinese sperm banks, consequently, must recruit and screen many more potential donors than Western sperm banks do. This raises costs, and means that infertile couples also have to wait up to three years before being able to access donor sperm. This is the second part of the "sperm crisis": Despite continuing efforts to mobilize potential donors, banks face chronic sperm shortages.

++ +

During an interview carried out under the shade of a tree next to a newly landscaped brook on the sprawling campus of Changsha's University of Science and Technology, 20-year-old Xueyu, a first-time sperm donor who had yet to qualify, was asked whether he thought that anyone should be allowed to donate sperm. After thinking about the question he replied: "The ones who have genetic diseases shouldn't be admitted to come. Otherwise the bad genes will be transmitted to offspring. We need to make sure that the outstanding genes will be transmitted." When asked whether he thought donors should only be recruited from universities, Xueyu responded that high-achieving professionals should also be considered: "Their excellent work performance shows their perfect genes, so they also can provide good genes to the couples."

Although this was not the only view I heard, there is no question that ideas about genetic transmission of traits and diseases have played an important part in sperm banking in China. Some sperm banks explicitly connect their fertility services to national goals of improving population quality when finding new donors. The challenge for recruiters on university campuses is that relatively few students express interest in donating sperm—3 percent of a campus cohort in one sperm bank manager's estimate. To bring in students, recruitment flyers often feature slogans such as "Win endless glory" or "Donate sperm for the benefit of society." Sperm banks appeal to the compassion and altruism of potential donors by vividly describing the suffering of infertile couples and the happiness that a donor can bring to these families-in-waiting.

There are also more practical incentives. Since health care has become increasingly privatized in China, the possibility of having a free health check—a routine part of the donor screening process—is attractive to many students. Finally, financial compensation was a major draw. All in all, a qualified donor can earn between $632 and $948 or, as I ended up calling it, iPhone money. During a focus group interview with four university students carried out on the grassy campus of Changsha's Normal University, students were asked if they had ever considered becoming a sperm donor. The first answer was: "Maybe if I need an iPad one day!"

Yet even when recruiters manage to bring in students, the sperm bank's screening process disqualifies most potential donors. It is not uncommon for the 2,000–3,000 students who come to the sperm bank in Changsha each year to fail their first donation. Success is directly linked to the exceptional liveliness of a donor's sperm. ("Exceptional" because the Ministry of Health's concentration standard of 60 million sperm per millimeter is four times higher than the World Health Organization's criteria for normal male fertility.) As a

This paper has been accepted for publication in the World Policy Journal and the final (edited, revised and typeset) version of this paper will be published in the World Policy Journal 35(1), 2018 by Duke University Press.

result, all potential donors are given three chances to qualify. As one recruiter described it, "We have a two-year cycle. In the first semester maybe 2,000 students will come to the sperm bank, in the second semester maybe 150 students will come, and in the third semester maybe just 100. There are fewer and fewer with time."

On the busiest days at the sperm bank in Changsha, some 100 male university students show up to produce a sample for analysis by staff at the bank. Some of them have already been approved as donors, while others are there for the first or second time in an attempt to qualify. Once qualified, they are asked to make a total of 12 to 15 donations (this calculation is based on the limit of five women's pregnancies per donor) with at least three to four days between each one. In reality, though, the number of donations is higher as even qualified donors' deposits are sometimes rejected. While donors always risk running into people they know at the sperm bank, donation remains strictly anonymous. This is an absolute requirement for the donors I spoke to, many of whom insisted that sperm donation would cease to exist in China if anonymity were not guaranteed.

Anonymity and secrecy are essential to recipient couples and donors, not least because both groups want to avoid future trouble. Yet there are also elements of shame, guilt and inadequacy. As countless ethnographic studies from around the world have shown, the onus of infertility often falls almost entirely on women, even though male factor infertility is as likely to be the root cause of a couple's infertility. Anthropologist Marcia Inhorn has argued that involuntary childlessness is often unrecognized (or, at most, under-recognized) as a public health problem in countries "where children are highly desired, parenthood is culturally mandatory, [and] infertility is a socially unacceptable condition." In such contexts, "infertile people's suffering is often exacerbated." This is also what medical anthropologist Lisa Handwerker found when carrying out ethnographic studies at infertility clinics in Beijing. Through interviews with infertile women and men, she concluded that China's "birth policy aimed at reducing births has ironically led to the further stigmatization of infertile women" as the pressure to have "one child" had intensified.

These pressures have surely driven the growing shadow market for sperm which relies on middlemen brokering connections between donors and infertile couples on a much smaller scale than sperm banks operate. In 2008, a series of news reports set out to expose this black market. An undercover reporter in Jilin Province recounted his investigation of a web forum posting where a man had advertised that he was willing to provide sperm to an infertile couple for $3,162. (By comparison, the estimated cost per legal assisted insemination is cycle is $476. A legal IVF cycle costs up to $4,761, and a procedure in which sperm is directly injected into an egg costs up to $5,554 per cycle. Fertility treatment is not covered by private or public insurance in China, which means that for many couples, it remains out of reach.) Similarly, a news reporter in Heilongjiang Province responded to an advertisement he found taped on to a street-side wall in Harbin that read:

> Do you feel upset because you can't have a child? Do you feel helpless because there is no suitable sperm source? Our sperm selling company is willing to offer

> you good-quality sperm and can help you solve your problems and troubles … The company has strong men of different ages available.

The reporter met with Mr. Wang, a middleman who had put together a catalog of 11 sperm donors who he could arrange to provide fresh donations at a location decided by the recipient couple. As a middleman, Mr. Wang ensured a certain distance between donor and couple. He followed a tiered pricing system, which, he told the undercover reporter, was worked out "according to the condition of body and education level: Married men with children can only prove their fertility, but their physical condition is not as good as young people, so they charge low fees. Students are young and strong; they can enter university and graduate studies, which shows that they have higher IQ, so they charge higher fees." The dangers of such an unregulated market are that medical screening procedures are foregone while the legal rights and duties of recipients and donors are not ensured as they are when couples use state sanctioned sperm banks.

In recent years, a string of studies have been published addressing questions of what an adequate life, a moral life, or a good life in China might be. This is not surprising given the country's profound economic, demographic, social, and environmental transformations over the last three decades or so. Having children has long been a part of what makes life good in China. When it comes to sperm banking, the notion of "good-quality" sperm is held up above all else. This, after all, affects not only the quality of life of the infertile couple, but also that of the extended family, the baby, and the population as a whole. With China positioning internationally as a competitive nation, having a satisfied population has become an urgent political objective.

On the fourth floor of the sperm bank in Changsha, potential donors are directed to a waiting room outfitted with rows of orange tables and benches, which are often filled with students either waiting to use a private donation room or for the results of their semen analysis. Students who have arrived by themselves rarely talk to each other, opting instead to mask their apparent embarrassment and shyness by staring into their phones, reading some of the newspapers and magazines that are lying around, or preparing for classes. Every once in a while the relative silence of the waiting room is broken when a battered, plastic speaker crackles into life—"Number 54, please"—asking for the next donor to proceed into the donation area. The receptionist plays a crucial choreographing role, welcoming students, keeping the flow of donors as smooth as possible to minimize waiting times, and providing words of encouragement to make students feel as relaxed as possible. The atmosphere is very often light-hearted and at times also humorous as staff members and experienced donors chat while newcomers sit quietly and nervously as they wait for their turn. When I ask a qualified donor how he would empathize with newcomers, he responds, "Sometimes some new donors will feel anxious. When I look at them I will feel it is just like me two weeks ago, yeah, then I will tell them, 'Dude, don't be worried, I once failed too but then I passed it and now I am here as a successful donor.' "